

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street San Francisco, CA 94105-3901

June 30, 2015

Mike Medieros Manager, Renewable Energy Development Pacific Gas and Electric Company 245 Market Street, Room 1309 San Francisco, CA 94105

Re: Underground Injection Control (UIC) Permit

Class V Experimental Well, R9UIC-CAS5-FY13-1

Pacific Gas and Electric Company (PG&E)

Review of April 2015 Monthly Report and Evaluation of Annular Pressure-

Temperature Relationship, dated June 8, 2015

Dear Mr. Medieros:

This letter is to notify you that the EPA has completed its review of the subject documents. Our comments are included in the Enclosure. Please provide a response as requested.

Please contact Michele Dermer at (415) 972-3417 if you have any questions.

Sincerely,

David Albright

Manager

Drinking Water Protection Section

Enclosure

cc: Mike Woods, CA DOGGR, District 4

Scott Armstrong, Regional Water Quality Control Board, Central Valley Region

ENCLOSURE

COMMENTS ON THE APRIL 2015 MONTHLY REPORT FOR THE PG&E TEST INJECTION/WITHDRAWAL WELL 1

- 1. The permit requires continuous monitoring and recording of tubing and annulus pressures and temperatures in the Piacentine 1-27 well, and those data are presented in Attachment 2 of the April Monthly Report. However, the Evaluation of Pressure Monitoring Data from the Piacentine 1-27 Observation Well, (presented in Attachment 4 and discussed in the transmittal letter for the March Monthly Report) was not included in the April Monthly Report. PG&E should provide the plot of reservoir pressure versus cumulative net injection volumes and the associated tables, or explain why the discussion, plot and tables were omitted. Also, a discussion comparing the actual to the predicted bottom hole pressures should be added, as in the March 2015 Monthly Report.
- 2. The footnotes to the daily monitoring data table and hourly monitoring data table in Attachment 2 indicate that a TDML log and temperature log were run in the Piacentine 1-27 well. Also, footnote 2 to Attachment 2a, the hourly monitoring data table, indicates that a BHP survey was run in this well. PG&E should provide copies of the logs and BHP survey report to EPA.

Please provide an updated monthly report, or supplemental information to address these comments.

Comments on the June 8, 2015 Updated Evaluation of Annular Pressure – Temperature Relationship in the PG&E Test Injection/Withdrawal Well 1

We concur with the conclusions provided by PG&E, that the higher than expected annulus pressures are due to thermal effects, rather than a loss of mechanical integrity. However, during the post-test monitoring period, an annular pressure test (internal MIT) at the maximum allowable surface injection pressure (2,500 psig) is required to confirm the absence of leaks in the tubing, packer, and casing. Please provide a plan for testing.